

The Marshall Plan and its socio-ecological side effects. Conceptual and case based considerations

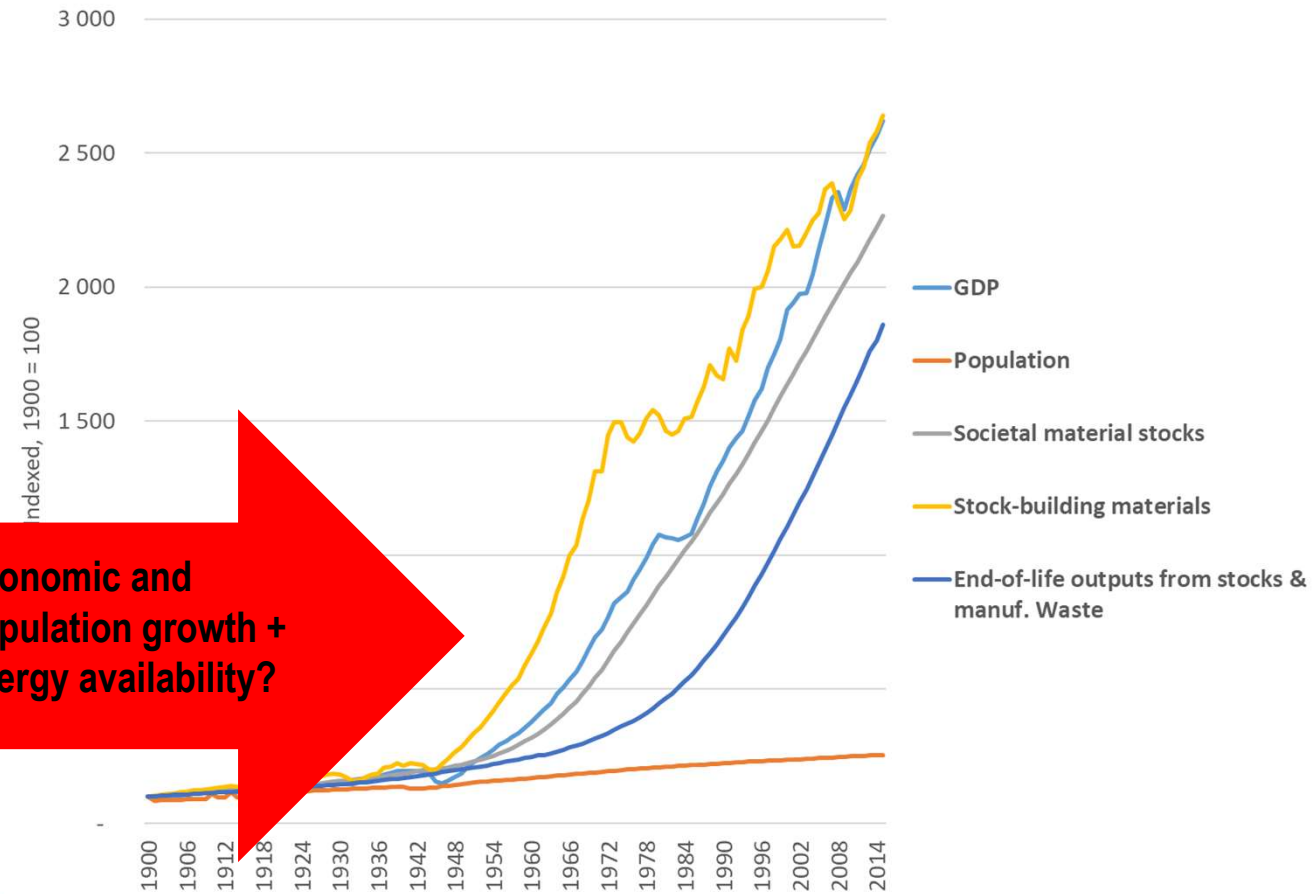
Robert Groß (Innsbruck University & University of Natural Resources and Life Sciences, Vienna);

Dominik Wiedenhofer (University of Natural Resources and Life Sciences), Vienna

Conference: Resources for a social-ecological transformation;
Innsbruck University; February 29th, 2019



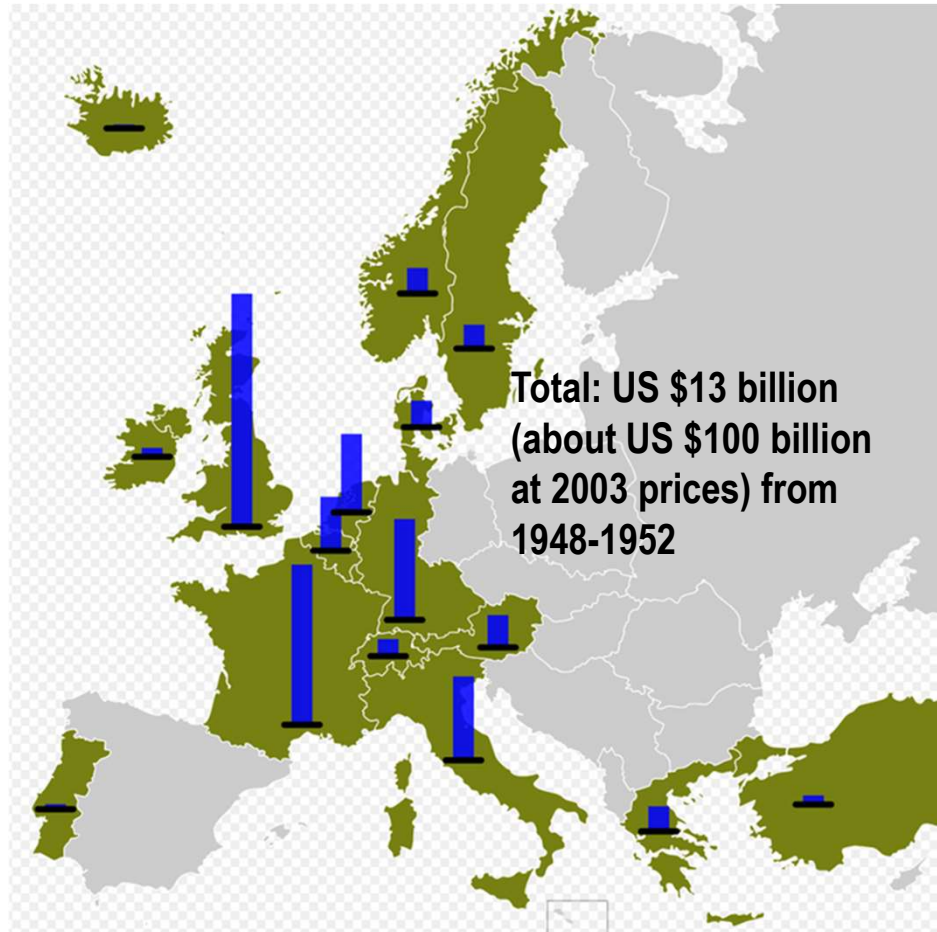
The development of GDP, population, total material stocks, all stock-building materials and end-of-life materials to be managed



Economic and population growth + energy availability?

Source: Krausmann et al. 2017 & Wiedenhofer et al. In prep.

The Marshall Plan



	ERP/GDP (in %) July 1948-June 1949	Imports of machinery, vehicles, iron and steel and products as percentage of all ERP-shipments (in %)
Austria	14,0	11,3
Belgium/ Luxembourg	0,6	36,8
Denmark	3,3	19,8
France	6,5	23,4
W. Germany	2,9	3,3
Iceland	5,0	41,8
Ireland	7,8	8,9
Italy	5,3	20,6
Netherlands	10,8	24,2
Norway	5,8	25,7
Sweden	0,3	25,5
UK	2,4	3,3
Mean value	5,4	18,9

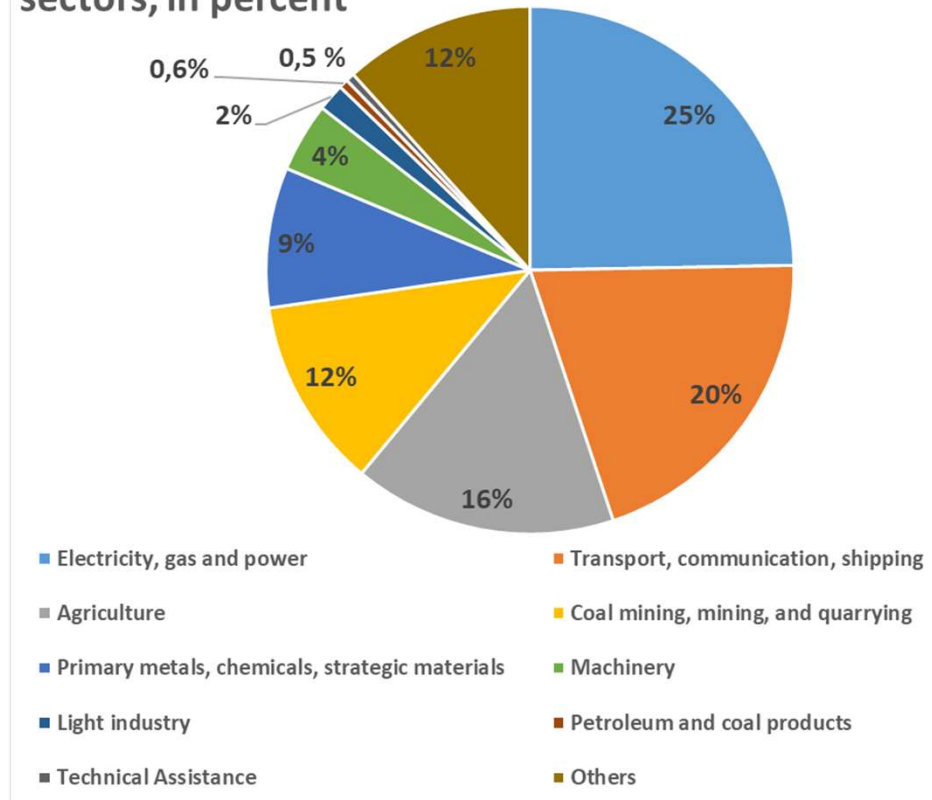
Source: https://de.wikipedia.org/wiki/Marshallplan#/media/File:Marshall_Plan.svg (26.2.19)

Source: A. S. Milward, The Reconstruction of Western Europe 1945-51, p. 96 & 102

Counterpart Funds

- A condition for receiving Marshall aid;
- US \$ 39 billion from 1948-1953 (about US \$ 300 billion at 2003 prices);
- Investments in infrastructure: Austria, Germany, Italy and France;
- Anti-inflationary measures: UK and Norway

Investments of ERP counterpart funds by sectors, in percent



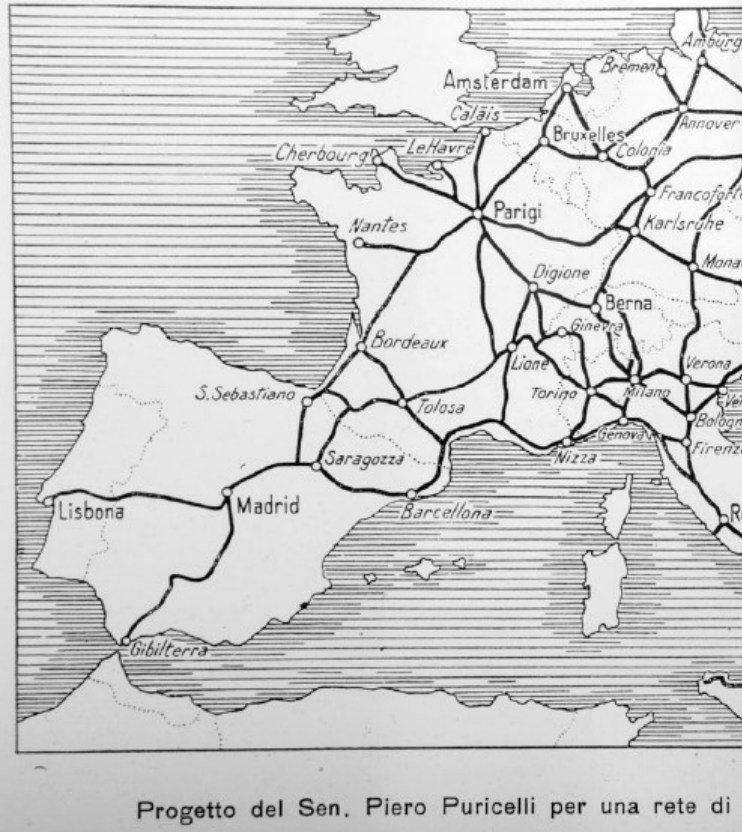
Source: A. S. Milward, The Reconstruction of Western Europe 1945-51, p. 109

Hidden Integration as a Driver for the Development of Societal Stocks?

European integration as process in which visionary individuals „took determined steps to create a peaceful political institutional European order“ versus „using the lens of technology to situate European integration as an emergent outcome of a process of linking and delinking infrastructure, as well as the circulation and appropriation of artefacts, systems and knowledge.“

(Misa & Schot, Inventing Europe: Technology and the Hidden Integration of Europe. In: History and Technology: 21/1, 2005)

Hidden Integration as a Driver for the Development of Societal Stocks?



Puricelli's 1934 European motorway network, as presented at the PIARC conference

How the MP Fueled Societal Stocks

	Marshall Aid 1948-1951 (in million US \$)	Petroleum Aid (in million US \$)	As % of Total Aid	Refinery Capacity 1948 (MMT)	Refinery Capacity 1951 (MMT)	Motor Vehicles 1938 (x1000)	Motor Vehicles 1947 (x1000)	Motor Vehicles 1951 (x1000)
Austria	561,4	3,6	0,6			48,6	50,1	109,2
Belgium-Luxembourg	546,0	60,0	10,9			236,8	250,0	473,6
Denmark	258,9	56,2	21,7			150,7	151,7	188,3
France	2451,7	380,9	15,5			2305,0	1750,0	2567,0
Germany	1298,5	54,6	4,2			1694,0	682,0	1500,0
Greece	527,4	20,7	3,9			17,3	20,0	31,7
Iceland	23,8	1,4	5,9			2,0	10,1	10,6
Ireland	147,4	13,3	9,0			64,7	77,6	132,0
Italy	1349,1	143,6	10,6			373,0	372,0	674,0
Netherlands	881,6	64,9	7,4			141,5	129,4	247,4
Norway	237,8	36,1	15,2			90,6	108,0	133,9
Portugal	51,2	8,6	16,8			47,8	59,8	96,5
Sweden	118,5	67,2	56,7			219,6	237,9	410,1
Turkey	155,5	5,0	3,2			9,5	18,6	32,6
UK	2838,1	331,1	11,7			2532,0	2722,0	3446,0
Total	11.801,5	1.247,2	10,6	19.500.000	58.000.000	7.928,3	6.632,2	10.052,9

Source: David Painter, The Marshall Plan and Oil. In: Cold War History, 9:2, 159-175,.

Preliminary Conclusions:

- Marshall aid might have create a considerable demand in stockbuilding resources, which is not studied until now;
- It's implementation was accompanied by novel, transnational expert networks. By which measures they upscaled resource flows?
- Due to the richness of sources the Marshall Plan left in European and US archives, studying the Marshall Plan might provide a better understanding of the framework conditions under which a socio-metabolic transformation took place;



Thanks for your attention!

Robert.gross@uibk.ac.at

Dominik.wiedenhofer@boku.ac.at



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